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### COMMENTS:

Please provide copies of the attached to Ben and to Byron Yafuso. Thanks.

Best Available Copy

Byron:

Thanks for your most recent comments on the LMR patent application. I have implemented all of your suggested editorial changes. In addition, your point regarding the language of claim 1 is well taken. In response, I have amended claim 1 to indicate that the switch matrix provides an information signal received from a given channel of the telephone network to other channels *via the telephone network interface* (previously the modem interface). This makes clear that the switch matrix does not itself multicast the signal received from the selected user, but instead that multicasting is done using the telephone network interface.

In order to make the claims more consistent with the revised description of the network manager, I have substituted "channels of the telephone network" for the term "telephone lines" throughout the claims. See the description of the T1 interface 92 (i.e., the claimed telephone network interface) at page 7 of the specification, which makes reference to the "T1 channels 44".

Additionally, the recitation of "telephone network interface" rather than "modem interface" would appear to render at least the broadest claims equally applicable to analog and digital implementations of the network manager.

Finally, new claims 28-29 claim the invention in a slightly different way by retaining the language of original claims 1-2.

Please let me know if you feel any further changes to the application would be appropriate prior to filing.

Regards,

Kevin Zimmer

## WHAT IS CLAIMED IS:

1. In a communication system in which users communicate through a switched telephone network, a private communication network for facilitating communication among a plurality of member users, said private communication network comprising:
  - a network call manager including:
    - a telephone network interface for establishing a telephone connection with each of said plurality of member users over a plurality of channels of said switched telephone network, respectively;
    - a switch matrix, coupled to said telephone network interface, for providing an information signal received by said telephone network interface over one of said plurality of channels to other of said plurality of channels via said telephone network interface;
    - controller means for configuring said switch matrix in response to talk request signals received over a selected one of said plurality of channels; and
  - a plurality of authorized telephone sets disposed for communication over said plurality of channels, each of said authorized telephone sets including means for generating one of said talk request signals.
2. The private communication network of claim 1 wherein said controller means including means for identifying said selected one of said plurality of channels by choosing among ones of said talk request signals received over corresponding ones of said plurality of channels.
3. The private communication network of claim 1 wherein a selected one of said plurality of authorized telephone sets includes:
  - vocoder means for digitally processing input information in order to produce a sequence of vocoder data packets, and
  - modem means for generating said information signal using said vocoder data packets.
4. The private communication network of claim 3 wherein said modem means includes means for multiplexing said talk request signal with said vocoder data packets and for using the result during formation of said information signal.
5. The private communication network of claim 1 wherein said controller means includes means for verifying that said information signal received over said selected one of said plurality of channels was generated by a given one of said plurality of authorized telephone sets.
6. The private communication network of claim 5 wherein said controller means includes means for configuring said telephone network interface to call other ones of said authorized telephone sets subsequent to receipt by said network call manager of said information signal from said given one of said plurality authorized telephone sets.
7. The private communication network of claim 1 further including wireless network means for operatively coupling one of said plurality of authorized telephone sets to a corresponding one of said plurality of channels.
8. The private communication network of claim 1 wherein each of said plurality of authorized

telephone set includes means for generating an encrypted signal by encrypting an information signal provided by one of said member users, said encrypted signal being transmitted over a corresponding one of said plurality of channels.

9. The private communication network of claim 8 wherein each of said plurality of authorized telephone sets includes means for recovering one of said information signals from one of said encrypted signals transmitted over a corresponding one of said channels.

10. In a communication system in which users communicate through a switched telephone network, a network call manager for facilitating private communication among a set of member users, said network call manager comprising:

a telephone network interface for establishing a telephone connection with each of a plurality of said member users over a corresponding plurality of channels of said switched telephone network;

a switch matrix, coupled to said telephone network interface, for providing an information signal received over a selected one of said plurality of channels to other ones of said plurality of channels via said telephone network interface; and

controller means for configuring said switch matrix in response to control information received over at least one of said plurality of channels.

11. The network call manager of claim 10 wherein said controller means includes a controller for selecting said selected one of said plurality of channels in response to a talk request signal received over said selected one of said plurality of channels.

12. The network call manager of claim 11 further including wireless network means for establishing communication between at least one of said member users and said switched telephone network.

13. The network call manager of claim 12 wherein said controller means includes arbitration means for choosing said selected one of said plurality of channels on the basis of talk request signals received from ones of said member users over corresponding ones of said plurality of channels.

14. The network call manager of claim 13 wherein said controller means includes means for informing ones of said member users via corresponding ones of said plurality of channels of the identity of a selected member user providing said information signal over said selected one of said plurality of channels.

15. The network call manager of claim 14 wherein said controller means includes means for informing at least one of said member users via a corresponding one of said plurality of channels of the identities of ones of said member users associated with corresponding ones of said plurality of channels.

16. In a switched telephone network incorporating a private communication system disposed to allow for private communication among member users, a dual-mode authorized telephone set operatively coupled to a telephone channel of said switched telephone network and disposed for

operation in first and second modes, said dual-mode authorized telephone set comprising:  
transmit means for:

during operation in said first mode,  
digitally processing an input signal into a digital information signal for  
propagation over said telephone channel, and generating a talk request signal in  
response to predefined user input, and for,  
during operation in said second mode,  
providing an input signal to said telephone channel, and

receiver means for:

during operation in said first mode,  
digitally processing information signals carried by said telephone channel  
and for providing the resultant processed signals to an output device, and for,  
during operation in said second mode,  
providing information signals carried by said telephone channel to said  
output device.

17. In a private communication system incorporated within a switched telephone network, said private communication system including a call manager for facilitating communication among member users through said switched telephone network, an authorized telephone set in communication with a telephone channel of said switched telephone network, said authorized telephone set comprising:

a transmit module including:

a vocoder module switchably connected to an input port for digitally processing  
an input signal into a packetized information signal,

a controller for generating a talk request signal in response to predefined user  
input, and

reverse link transmitter means for transmitting said packetized information signal  
and said talk request signal over said telephone channel wherein said call manager  
determines routing of said packetized information signal through said switched telephone  
network on the basis of said talk request signal; and

a receive module for receiving forward link signals routed to said authorized telephone  
set from a selected one of said member users by said call manager.

18. The authorized telephone set of claim 17 wherein said reverse link transmitter means  
includes:

a modem having an input port and an output port, said output port being coupled to an  
input of a transmitter, and

means for multiplexing said packetized information signal from said vocoder module with  
said talk request signal and for providing the resultant multiplexed signal to the input port of said  
modem.

19. The authorized telephone set of claim 18 wherein said transmit module includes an input  
switch interposed between an input of a codec unit and an input microphone, said codec unit  
having an output connected to an input of said vocoder module.

20. The authorized telephone set of claim 19 wherein said switch connects said input microphone

to said input of said codec unit when said authorized telephone set is operative in a first mode and connects said input microphone to said input of said transmitter when said authorized telephone set is operative in a second mode.

21. The authorized telephone set of claim 17 wherein said transmit module further includes means for encrypting said packetized information signal.

22. The authorized telephone set of claim 17 wherein said receive module includes means for decrypting said forward link signals.

23. In a communication system in which users communicate through a switched telephone network, a method for facilitating private communication among a plurality of member users, said method comprising the steps of:

establishing a telephone connection between a network call manager and each of a plurality of telephone channels of said switched telephone network, each of said plurality of telephone channels being associated with one of said plurality of member users;

providing an information signal received at said network call manager over a selected one of said plurality of telephone channels from an active one of said member users to other ones of said member users over other ones of said plurality of telephone channels;

generating talk request signals at a plurality of telephone sets associated with said plurality of member users for transmission to said network call manager via said switched telephone network; and

choosing said active member user on the basis of said talk request signals received at said network call manager.

24. The method of claim 23 further including the step of identifying said selected telephone channel by choosing among ones of said talk request signals received over corresponding ones of said plurality of telephone channels.

25. The method of claim 23 further including the steps of digitally processing information from said active member user in order to produce a sequence of vocoder data packets for modem transmission to said network call manager.

26. The method of claim 23 further including the step of coupling said information signal from said active member user through a wireless communication network to said selected one of said plurality of telephone channels.

27. The method of claim 23 further including the steps of:

encrypting information signals generated within the one of said plurality of telephone sets associated with said active member user,

transmitting the encrypted information signals to said network call manager, and

decrypting the encrypted information signals received from said network call manager at the ones of said plurality of telephone sets associated with said other ones of said member users.

28. In a communication system in which users communicate through a switched telephone

network, a private communication network for facilitating communication among a plurality of member users, said private communication network comprising:  
a network call manager including:

- a telephone network interface for establishing a telephone connection with each of a plurality of telephone lines of said switched telephone network, each of said plurality of telephone lines being associated with one of said plurality of member users;
- a switch matrix, coupled to said telephone network interface, for providing an information signal received over a selected one of said plurality of telephone lines to other ones of said plurality of telephone lines via said telephone network interface;
- controller means for configuring said switch matrix in response to talk request signals received over said plurality of telephone lines; and
- a plurality of authorized telephone sets disposed for communication over said plurality of telephone lines, each of said authorized telephone sets including means for generating one of said talk request signals.

29. The private communication network of claim 28 wherein said controller means including means for identifying said selected telephone line by choosing among ones of said talk request signals received over corresponding ones of said plurality of telephone lines.

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